Art Unit: 3624

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Brian R Drozd on June 16, 2009.

In the claims:

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method of managing operational risk for an organization, the method comprising:

identifying at least one failure mode for a function of the organization; identifying at least one cause and at least one effect for at least one of the at least one failure mode:

acquiring ratings associated with the at least one cause and the at least one effect;

permuting the at least one failure mode, the at least one cause, and the at least one effect to define at least two risk items; and

producing a risk prioritization report of the at least two risk items based at least in part on the ratings associated with the at least one cause and the at least one effect, the ratings comprising:

a severity rating and a response rating associated with each of the at least one effect; and

an occurrence rating and a detection rating associated with each of the at least one cause; and

wherein the acquiring, permuting and producing steps are performed by a computer; and

wherein the producing of the risk prioritization report comprises:

calculating a criticality based on the severity rating and the occurrence rating;

calculating a risk priority number based on the severity rating, the occurrence rating and the detection rating; and

calculating an adjusted criticality based on the criticality, the severity rating, and the response rating.

wherein the calculating steps are performed by a computer.

(Original) The method of claim 1 further comprising:
 recording a mitigation plan associated with at least one of the at least two
 risk items in the risk prioritization report; and
 tracking implementation of the mitigation plan.

Art Unit: 3624

3-4. (Cancelled)

 (Currently Amended) The method of claim 1[[4]] further comprising: determining whether the at least one effect is related to at least one of a group consisting of compliance and strategic planning;

wherein the producing of the risk prioritization report further comprises determining whether each of the at least two risk items represents at least one of a group consisting of a compliance related risk, a strategic planning related risk, a hidden factory, and a tail event.

- 6-8. (Cancelled)
- 9. (Original) The method of claim 1 further comprising: acquiring failure mode likelihoods associated with the at least one failure mode for the function; and validating the ratings using the failure mode likelihoods.
- 10. (Original) The method of claim 2 further comprising:
 acquiring failure mode likelihoods associated with the at least one
 failure mode for the function; and
 validating the ratings using the failure mode likelihoods.

11-12. (Cancelled)

Art Unit: 3624

13. (Original) The method of claim 1 further comprising validating the ratings using historical data.

14-16. (Cancelled)

- 17. (Original) The method of claim 1 wherein the producing of the risk prioritization report further comprises quantifying at least some of the risk items based on financial data.
- 18. (Original) The method of claim 5 wherein the producing of the risk prioritization report further comprises quantifying at least some of the risk items based on financial data.

19-20. (Cancelled)

- 21. (Original) The method of claim 1 further comprising determining a stability ratio, wherein the stability ratio represents a comparison of one of a number of priority risk items and a number of non-priority risk items to a total number of risk items.
- 22. (Original) The method of claim 2 wherein the method further comprises determining a stability ratio, wherein the stability ratio represents a

Art Unit: 3624

comparison of one of a number of priority risk items and a number of non-priority risk items to a total number of risk items and the tracking of the implementation of the mitigation plan further comprises tracking a stability ratio.

23. (Currently Amended) A computer program product comprising a computer readable medium with a computer program embodied therein for facilitating risk assessment and control for an organization, the computer program comprising:

instructions for identifying failure modes for at least one function of the organization;

instructions for identifying at least one cause and at least one effect for each failure mode;

instructions for acquiring ratings associated with the at least one cause and the at least one effect:

instructions for permuting the failure modes, the at least one cause, and the at least one effect to define risk items; and

instructions for producing a risk prioritization report of the risk items based at least in part on the ratings associated with the at least one cause and the at least one effect for each failure mode, the ratings comprising:

a severity rating and a response rating associated with each of the at least one effect; and

an occurrence rating and a detection rating associated with each of the at least one cause, and

Application/Control Number: 10/605,551

Art Unit: 3624

wherein the instructions for producing the risk prioritization report comprises:

instructions for calculating a criticality based on the severity rating and the occurrence rating;

instructions for calculating a risk priority number based on the severity rating, the occurrence rating and the detection rating; and instructions for calculating an adjusted criticality based on the criticality, the severity rating, and the response rating.

24. (Original) The computer program product of claim 23 wherein the computer program further comprises:

instructions for recording a mitigation plan associated with at least one of the risk items in the risk prioritization report; and

instructions for tracking implementation of the mitigation plan.

25-26. (Cancelled)

27. (Currently Amended) The computer program product of claim <u>23</u> [[26]] wherein the computer program further comprises:

instructions for determining whether the at least one effect is related to at least one of a group consisting of compliance and strategic planning;

wherein the instructions for producing of the risk prioritization report further comprise instructions for determining whether each of the risk items represents

Art Unit: 3624

at least one of a group consisting of a compliance related risk, a strategic planning related risk, a hidden factory, and a tail event.

28-30. (Cancelled).

31. (Original) The computer program product of claim 23 wherein the computer program further comprises:

instructions for acquiring failure mode likelihoods associated with the at least one failure mode for the function; and

instructions for validating the ratings using the failure mode likelihoods.

32. (Original) The computer program product of claim 24 wherein the computer program further comprises:

instructions for acquiring failure mode likelihoods associated with the at least one failure mode for the function; and

instructions for validating the ratings using the failure mode likelihoods.

33-34. (Cancelled)

35. (Original) The computer program product of claim 23 wherein the computer program further comprises instructions for validating the ratings using historical data.

Art Unit: 3624

36-38. (Cancelled)

- 39. (Original) The computer program product of claim 23 wherein the instructions for producing the risk prioritization report further comprise instructions for quantifying at least some of the risk items based on financial data.
- 40. (Original) The computer program product of claim 27 wherein the instructions for producing the risk prioritization report further comprise instructions for quantifying at least some of the risk items based on financial data.

41-42. (Cancelled)

- 43. (Original) The computer program product of claim 23 wherein the computer program further comprises instructions for determining a stability ratio, wherein the stability ratio represents a comparison of one of a number of priority risk items and a number of non-priority risk items to a total number of risk items.
- 44. (Original) The computer program product of claim 24 wherein the computer program further comprises instructions for determining a stability ratio, wherein the stability ratio represents a comparison of one of a number of priority risk items and a number of non-priority risk items to a total number of risk items and the instructions for tracking the implementation of the mitigation plan further comprise instructions for tracking a stability ratio.

Art Unit: 3624

45. (Currently Amended) Apparatus for facilitating risk management for an organization, the apparatus comprising:

a computing platform;

means for identifying failure modes for at least one function of the organization;

means for identifying at least one cause and at least one effect for each failure mode;

means for acquiring ratings associated with the at least one cause and the at least one effect;

means for permuting the failure modes, the at least one cause, and the at least one effect to define risk items; and

means for producing a risk prioritization report of the risk items based at least in part on the ratings associated with the at least one cause and the at least one effect for each failure mode, the ratings comprising:

<u>a severity rating and a response rating associated with each</u> <u>of the at least one effect; and</u>

an occurrence rating and a detection rating associated with each of the at least one cause; and

wherein the means for producing the risk prioritization report comprises:

means for calculating a criticality based on the severity rating and the occurrence rating;

Art Unit: 3624

means for calculating a risk priority number based on the severity

rating, the occurrence rating and the detection rating; and

means for calculating an adjusted criticality based on the criticality,
the severity rating, and the response rating.

- 46. (Original) The apparatus of claim 45 further comprising:

 means for recording a mitigation plan associated with at least one of the risk items in the risk prioritization report; and means for tracking implementation of the mitigation plan.
- 47. (Original) The apparatus of claim 45 further comprising:

 means for acquiring failure mode likelihoods associated with the at least one failure mode for the function; and means for validating the ratings using the failure mode likelihoods.
- 48. (Original) The apparatus of claim 46 further comprising:

 means for acquiring failure mode likelihoods associated with the at least one failure mode for the function; and means for validating the ratings using the failure mode likelihoods.
- 49. (Original) The apparatus of claim 45 further comprising means for validating the ratings using historical data.

50. (Original) The apparatus of claim 46 further comprising means for validating the ratings using historical data.

- 51. (Original) The apparatus of claim 47 further comprising means for validating the ratings using historical data.
- 52. (Original) The apparatus of claim 48 further comprising means for validating the ratings using historical data.
- 53. (Original) The apparatus of claim 45 further comprising means for determining a stability ratio, wherein the stability ratio represents a comparison of one of a number of priority risk items and a number of non-priority risk items to a total number of risk items.
- 54. (Currently Amended) A system for facilitating risk assessment and control for an organization comprising:

a computing platform having computer program code embodied therein, the computer program code comprising:

at least one analysis module to identify causes and effects associated with failure modes of at least one function of the organization and acquire ratings associated with the causes and effects;

at least one data store operationally connected to at least some of the at least one analysis module to store failure modes, causes, effects, and ratings; and

at least one calculation module operationally connected to the at least one data store to permute the failure modes, causes and effect to define risk items and produce a risk prioritization report of the risk items based at least in part on the ratings, wherein the ratings comprise:

a severity rating and a response rating associated with each effect; and

an occurrence rating and a detection rating associated with each cause, and

wherein the at least one calculation module is operable to calculate a criticality based on the severity rating and the occurrence rating, a risk priority number based on the severity rating, the occurrence rating and the detection rating, and an adjusted criticality based on the criticality, the severity rating, and the response rating.

55-56. (Cancelled)

57. (Currently Amended) The system of claim <u>54</u> [[56]] wherein the at least one calculation module is operable to determine whether each of the risk items represents at least one of a group consisting of a compliance related risk, a strategic planning related risk, a hidden factory, and a tail event.

Application/Control Number: 10/605,551

Page 14

Art Unit: 3624

58. (Original) The system of claim 54 further comprising a data validation module operationally connected to the at least one data store, the data validation module operable to validate ratings at least in part using historical data.

- 59. (Original) The system of claim 54 further comprising a risk data quantification module operationally connected to the at least one data store, the risk data quantification module operable to quantify ratings based at least in part on financial data.
 - 60-63. (Cancelled)
- 64. (Original) The system of claim 57 further comprising a data validation module operationally connected to the at least one data store, the data validation module operable to validate ratings at least in part using historical data.
- 65. (Original) The system of claim 57 further comprising a risk data quantification module operationally connected to the at least one data store, the risk data quantification module operable to quantify ratings based at least in part on financial data.

Art Unit: 3624

66. (Original) The system of claim 54 further comprising an operational interface to a risk meta-modeling system.

- 67. (Original) The system of claim 58 further comprising an operational interface to a risk meta-modeling system.
- 68. (Original) The system of claim 59 further comprising an operational interface to a risk meta-modeling system.

69-70. (Cancelled)

71. (Original) The system of claim 54 further comprising a stability analysis module operationally connected to the at least one calculation module to determine a stability ratio, wherein the stability ratio represents a comparison of one of a number of priority risk items and a number of non-priority risk items to a total number of risk items.

Allowable Subject Matter

3. Claims 1-2, 5, 9-10,13, 17-18, 21-24, 27,31-32, 35, 39-40, 43-54, 57-59, 64-68 and 71 are allowed.

Reasons for Allowance

4. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The closest prior art is to Chakib Kara-Zaitri et al "Chakib" (A Smart Failure Mode and Effect Analysis Package) in view of Moore et al (US 20040059589). The combination references of Chakib and Moore et fails to teach the ratings comprising a severity rating and a response rating associated with each of the at least one effect, an occurrence rating and a detection rating associated with each of the at least one cause, wherein the acquiring, permuting and producing steps are performed by a computer, wherein the producing of the risk prioritization report comprises calculating a criticality based on the severity rating and the occurrence rating, calculating a risk priority number based on the severity rating, the occurrence rating and the detection rating, calculating an adjusted criticality based on the criticality, the severity rating, and the response rating, wherein the calculating steps are performed by a computer, taken in combination with a method of managing operational risk for an organization, as recited in independent claim 1.

The closest prior art is to Chakib Kara-Zaitri et al "Chakib" (A Smart Failure Mode and Effect Analysis Package) in view of Moore et al (US 20040059589). The combination references of Chakib and Moore et fails to teach a severity rating and a response rating associated with each of the at least

one effect, an occurrence rating and a detection rating associated with each of the at least one cause, wherein the instructions for producing the risk prioritization report comprises instructions for calculating a criticality based on the severity rating and the occurrence rating, instructions for calculating a risk priority number based on the severity rating, the occurrence rating and the detection rating, instructions for calculating an adjusted criticality based on the criticality, the severity rating, and the response rating, taken in combination with a computer program product comprising a computer readable medium with a computer program embodied therein for facilitating risk assessment and control for an organization, as recited in independent claim 23.

The closest prior art is to Chakib Kara-Zaitri et al "Chakib" (A Smart Failure Mode and Effect Analysis Package) in view of Moore et al (US 20040059589). The combination references of Chakib and Moore et fails to teach a severity rating and a response rating associated with each of the at least one effect, an occurrence rating and a detection rating associated with each of the at least one cause, wherein the means for producing the risk prioritization report comprises means for calculating a criticality based on the severity rating and the occurrence rating, means for calculating a risk priority number based on the severity rating, the occurrence rating and the detection rating, means for calculating an adjusted criticality based on the criticality, the severity rating, and the response rating, taken in combination with an apparatus for facilitating risk management for an organization, as recited in independent claim 45.

The closest prior art is to Chakib Kara-Zaitri et al "Chakib" (A Smart Failure Mode and Effect Analysis Package) in view of Moore et al (US 20040059589). The combination references of Chakib and Moore et fails to teach wherein the ratings comprise a severity rating and a response rating associated with each effect, an occurrence rating and a detection rating associated with each cause, wherein the at least one calculation module is operable to calculate a criticality based on the severity rating and the occurrence rating, a risk priority number based on the severity rating, the occurrence rating and the detection rating, and an adjusted criticality based on the criticality, the severity rating, and the response rating taken in combination with a system for facilitating risk assessment and control for an organization, as recited in independent claim 54.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Chang et al (Failure mode and effects analysis using grey theory)
 discloses a method for determining a risk priority number by applying the theory
 to the failure mode and effects analysis.

b. Feather et al (Combining the Best Attributes of Qualitative and Quantitative Risk Management Tool Support) discloses a risk management system for determining risk relating to a project.

- c. Greenfield (Risk management tools) discloses a risk management system for calculating failure mode and effect analysis of risks, and calculating a severity for each failure.
- d. Alexander Carol (Bayesian Methods for Measuring Operational Risk Discussion Papers in Finance 2000-02, ISMA Centre) discloses a method for measuring and analyzing operational risks, such as transaction processing risk and human risks.
- e. Schaf et al (US Patent No. 7,409,357) discloses a method for measuring risk comprising the calculation of a number of losses per period in a unit conditional on the value of one or **several** risk ratings for a unit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Romain Jeanty whose telephone number is (571) 272-6732. The examiner can normally be reached on Mon-Thurs 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bradley Bayat can be reached on (571) 272-6704. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3624

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/Romain Jeanty/ Primary Examiner Art Unit 3624 June 22, 2009